

## AUTO INDUSTRY SEES BANNER YEAR AHEAD

**Detroit Manufacturers Expect  
1923 Business to Break  
All Records.**

**PRODUCTION NOW AT PEAK**

**Expansions Planned to Meet  
Demand—Big Merger Is  
Rumored.**

By ROY C. HAYES,  
Universal Service.

DETROIT, Dec. 30.—The automotive industry is facing the most prosperous year it has ever known, according to Detroit motor-car executives. Production schedules now arranged for 1923 should make the total output of cars and trucks approximately 3,000,000, it is estimated. A merger of three large Detroit companies is rumored, in order to afford greater working capital to meet the keen competition which the New Year promises. All local companies are bolstering their finances in preparation for a year that promises to offer the stiffest sort of competition, especially in cars of the medium-priced class.

**1922 BANNER YEAR.**  
Detroit motor plants have enjoyed the best December in history. The New Year is expected to offer better business than was enjoyed in the two banner years to date—1920 and 1922.

A signal indication of what is to be expected next year is seen in the attitude of Detroit plants during this year.

Not one Detroit plant has stopped its wheels entirely for the customary inventory period in December. The majority have canceled the customary one-week shutdown during the twelfth month.

Ford Motor Company, for instance, now employing 80,000 people, reduced its inventory period from two weeks or ten days to three working days. The inventory affected only the Highland Park plant, which employs 60,000 workers. Ford's 80,000 employees will all be on hand Tuesday to start work on an advancing production schedule, which promises to reach 6,000 a day by April 1. The current output approximates 5,000 a day.

Ford is now making 200 aluminum body four-door sedans daily. No official announcement has been made of the new body type because of the present demand which is in excess of the supply. The new body is said to be lighter and even more durable.

Cadillac Motor Car Company has done away with the usual inventory for the first time in its history to meet the demand for cars which has resulted from the recent price reduction.

**CAPACITY INCREASED.**  
Studebaker orders have been running considerably in excess of production. The company made 110,000 cars this year but the output fell short of the demand. To keep pace with the increasing call for cars Studebaker will erect two new units in Detroit. With the new units completed the Detroit plant will have a capacity of 275 cars a day.

With the return of Capt. E. V. Rickenbacker from a business trip to the Pacific coast, the Rickenbacker Motor Company has stepped up its production schedule from the proposed 10,000 to 15,000 cars to be made next year. Five thousand Rickenbackers have already been sold.

Hudson and Essex had the most successful years in their respective histories. Hudson sales for the year totaled 26,271. Essex figures came to 34,962. Dodge Brothers factories are running at capacity, turning out 625 cars a day. Maxwell now in full control of Chalmers, is going ahead with a schedule which will show some advance over 1922 on both Maxwell and Chalmers.

**Europeans Now  
Rank Second In  
Body Building**

**Salon Just Completed in New  
York Proves America in  
Ascendancy.**

That America now is unsurpassed in the art of body building was demonstrated to the satisfaction of automotive authorities at the luxurious automobile salon which has just drawn to a close in New York City, according to William N. Davis, Cadillac body engineer, who attended the salon.

This most exclusive of New York's automobile shows, held this year at the Hotel Commodore, serves as a preface de luxe to the National Automobile Show in January.

Twelve American body builders exhibited a total of thirty-five examples of coach, eight of which were shown on Cadillac chassis.

Eighteen years ago representatives of foreign car constructors came to America to show all by themselves to which only the elite of Gotham could be invited. These pioneers found little competition along Gotham's auto row, because American manufacturers were busy producing standard cars.

Recently all has changed. Custom body designing has improved by leaps and bounds, and now the products of United States designers are shown side by side with the most luxurious creations of the European world.

In addition to the foreign cars shown at the recent salon, leading American custom coach builders displayed their products upon chassis of both American and foreign manufacture. Among the bodies made in this country and displayed on Cadillac chassis were creations by such internationally known carrozzeria as Fleetwood, Henley, Holbrook and Judkins.

**Woman Auto Race Driver.**  
Bavoness D'Avanzo, who has been in the news for her only woman auto race driver, will be in the city next week to take a Indianapolis, Ind.

'23

By J. H. YEOMANS.

Upon this last day of the old year we feel an insatiable desire to fall in line with others of the ilk and tell motordom just what is to be expected in the new year—we feel that it behooves us to take our standard keyboard in hand and prognosticate.

Any decorated reference to the accomplishments of the motor industry during the past year would be superfluous, as we have very carefully enumerated every outstanding feat of motorear building as it has come to light and credited each brand with its merits—we have told off and emphatically of the relation of the car to man and the whys and wherefores of an investment in a car.

Leaving the old year with our hat off to its contributions to motor transportation we will face the future, the new year with its good that we anticipate and its bad that we hope may be avoided by detour.

To begin with there is going to be a world of new stuff under the sun of '23 and it won't be long now before the innovations in automobile construction will begin to dawn on you—we will not divulge all of the advance information that has come to us from confiding motor magnates but we will attempt to give you an inkling of what is to be au fait in the gas wagon of the new year.

We have it from the master mechanics of several leading factories that wheels will be continued during 1923 and little if any change will be noted in the number allotted to the new models. A very trusting builder tells us that splines will be used in the cars of the new year and that he expects to see connecting rods between pistons and crankshafts as usual.

Still another motor authority eases us the information that, come what may, cambre will be maintained—he even goes farther and confidentially tells us that the popularity of the cotter pin will not wane for at least a twelve-month.

We are authorized to say that windshields will be placed between the driver and the future in all new models as they were in the old and rims will be round regardless of any rumors to the contrary.

We feel sure that jacks will have an elevating influence upon motorears next year if their operation is clearly understood by the '23 crop of drivers. No authority has committed himself as to what is going to be done with shims but we presume that they will be found in the same places.

Wrist pins will connect the northern ends of connecting rods with pistons in all cars that run and unless we have misunderstood our informant 1923 ignition systems will be very dependent upon "juice" for their effectiveness. Motors will be hooded next year in spite of a wave of feeling against the Klan and whether you like it or not your new car will be fitted with headlights on the bow or leading end and rear lights on the stern.

On some '22 cars all lights have proven themselves stop-lights and with this fault in view 1923 lights will be so assorted as to confine stop-lights to the trailing end of the car.

Having laid before you the few important and salient features of the automobiles of 1923 that we are free to release we feel that we should close as gracefully as possible by committing you to your automobile representative for safe conduct further into the mysteries of the future car wishing you and him and us a Happiest New Year.

## More Miles Per Car in WINTER by Ray McNamara

FREQUENT CRANKCASE DRAINING SAVES MONEY  
AND MATERIAL.

Copyright, 1922, By The Christy Walsh Syndicate.

FROM our discussion last week of complete stoppage in one of oil lines, on the all-important topic of lubrication it was readily seen how oiling systems differ according to the engine design.

There are other mechanical features embodied in the motors of different makes of cars, even though the oil system is identical in construction, that require one manufacturer to operate his oil system at ten pounds pressure, while another may use forty-five to sixty pounds pressure. Therefore, you can appreciate the necessity of forming an acquaintance with the particular design used in your car. Know what pressure the system is supposed to operate with and the dangers that may result from incorrect circulation.

In breaking in a new motor, it should never be driven over twenty-four miles per hour for the first 500 miles. The oil should be drained from the crankcase and replenished with new oil after the first 200 miles, 500 miles and 1,000 miles and every 1,000 miles thereafter.

A motor that has been thoroughly overhauled or one on which the pistons and connecting rods have been bearing adjustment should be treated the same as a new motor for the first 1,000 miles of service.

This procedure is absolutely necessary because in the case of new motors there is always danger of oil chips or metal particles or granulated particles of metal becoming detached from motor parts in the first 1,000 miles of service and circulating with the oil, this matter will scratch bearings and may cause partial or

**U. S. Auto License Is  
Provided in New Bill**

The American Automobile Association has a bill to present to Congress at the next session which provides for a Federal automobile license, permitting automobiles to cross State boundaries without molestation from constables who require a State license from each State entered.

**Portable Dental Office.**  
Dr. T. W. Caldwell, a dentist of Saskatchewan, Canada, has a dental ambulance which was converted from a passenger automobile. Dr. Caldwell uses this specially constructed car as living quarters, as well as a work room, while traveling around the country. Light, heat and hot and cold water are among the conveniences.

**Jaywalker Fined for Bump.**  
For "getting hit" by an automobile, William Berwick, of Kenmore, Ohio, was fined \$5 and costs. It was found that Berwick caused the accident, and the driver was exonerated.

## REPORT PRODUCTION OF 26 AUTO TYPES

**General Motors Finds That  
Closed Car Styles Gain  
In Popular Favor.**

In a pamphlet just off the press, General Motors lists and describes its complete line of passenger automobiles. Some of the figures are of real interest.

The five divisions of the corporation that manufacture passenger cars are producing twenty-six individual types of cars, ranging in size from the two-passenger roadster to the seven-passenger imperial limousine. Of all types, the five-passenger sedan is numerically the most popular. The divisions make seven different styles of this car. Next in popularity comes the two-passenger roadster, of which six styles are made. The familiar five-passenger touring car comes in five styles, one from each division. These figures are suggestive of the trend of manufacture, as showing the increasing popularity of the closed models.

If the passenger cars made by General Motors were on exhibition in one hall, with an example of each individual style manufactured, there would be forty-nine cars shown, divided as follows: Buick, fourteen; Cadillac, ten; Chevrolet, five; Oakland, six; Oldsmobile, fourteen. The corporation makes eighteen cars of 8-cylinder engine; fifteen of 6-cylinder engine; and sixteen of 4-cylinder engine.

Besides its passenger cars, General Motors makes seven trucks, ranging from 1-ton to 5-ton, and three tractors, 5-ton, 10-ton and 15-ton.

In the wide range of price classes, the following figures are noted: \$500 to \$1,000, eleven cars; \$1,000 to \$1,500, thirteen cars; \$1,500 to \$2,000, thirteen cars; \$2,000 to \$2,500, two cars; \$2,500 to \$3,000, ten cars; \$3,000 to \$3,500, three cars; \$3,500 to \$4,000, three cars; \$4,000 to \$4,500, three cars; above \$4,500, one car, at \$4,600.

Beside the details on vehicles, the pamphlet states briefly the scope of General Motors and its sixty-seven divisions, subsidiaries and affiliated companies, and its activities on this continent and overseas. Measured by its organization, facilities, financial position and volume of business, the corporation is the second largest industrial group in America.

**Hupmobile Open  
Car Models Make  
Hit With Public**

**Fifty Per Cent of Factory Out-  
put Devoted to New Tour-  
ings and Roadsters.**

The reception accorded by the buying public to the specially equipped Hupmobile touring and roadster models has been so enthusiastic that it has already been found necessary to devote nearly 50 per cent of the Hupmobile open car output exclusively to these two models.

This announcement was made yesterday by O. C. Hutchinson, general sales manager of the Hupp Motor Corporation.

Owing to the rapid sales of both models numerous distributors from various sections of the country have besieged the company at Detroit to increase their allotments at once.

Equipment on both cars includes nickel-plated radiator, radiator cap and bar, cowl lamps, barrel head lamps, aluminum scuff plates, disc wheels and a special imported Burbank top in dark brown. The roadster also carries the additional equipment of nickel-plated bars on the rear deck and a tilted tire carrier. Otherwise both cars are the same as the standard Hupmobile models.

"Both cars," Mr. Hutchinson says, "have met a ready response from that increasing class of buyers which seeks the specially equipped models."

## The MOTOR DIGEST

**Automotive Activities Through-  
out the World.**

**Just a Man's Job.**  
A law has been enacted in Ohio which forbids women to operate taxicabs.

**An Army of Workers.**  
The automotive industry gives employment to 2,480,000 men and women in the United States.

**Millions for Special Bodies.**  
Motorists in the United States spend approximately \$60,000,000 a year for special bodies.

**Have Added Stop Lights.**  
Stop lights have become a part of the equipment on nineteen of the new model passenger automobiles.

**Newest College Sport.**  
Students at the University of Indiana have adopted auto polo along with their many other outdoor sports.

**America's Motors vs. Population.**  
There are enough motor vehicles in the United States to take the entire population for a ride at one time.

**Motor Industry in France.**  
France has seventy-five automobile manufacturers. The annual production is approximately 100,000 cars and trucks.

**Daily Automotive Activities.**  
Approximately 154,700 motor vehicles enter and leave New York city daily, carrying nearly half a million passengers.

# Ford

## INTERESTING FACTS

106,327 Ford Cars and  
Trucks Retailed in  
November

Approximately the same number scheduled  
for delivery this month

## What Does This Mean?

This volume of deliveries to actual owners is entirely unprecedented for this time of the year—

It has taxed the manufacturing ability of the Ford plants working at full capacity—

It indicates a volume of business during the rapidly approaching months of "heavy demand" which will be far beyond the maximum production schedule which the Ford Motor Company has set—

And that means a Ford shortage even more acute than the one which existed last Spring and Summer.

Dealers' stocks all over the country are low—there are no reserves to draw upon to meet the demands for delivery—

There is no way in which dealer reserves can be built up, as deliveries have been made to customers as fast as Cars could be manufactured since last April.

The only way you can protect your desire to obtain prompt delivery of a Ford even at this time is to place your order immediately.

*This emphasizes more strongly than anything we could possibly say the necessity of your making prompt arrangements with a Ford Dealer for the listing of your order, particularly if you are contemplating the purchase of a Ford Car or Truck for use this Spring or Summer.*

We believe you are entitled to know these facts as they actually exist.

# Ford Motor Company

Detroit, Michigan

See any Authorized Washington Ford Dealer

**A Small Deposit and Easy Payments if Desired**